What is claimed is:

1. A system for dynamically translating a Hypertext Markup Language (HTML) document to Voice eXtensible Markup Language (VoiceXML) form comprising:

a voice server for receiving a user request and, in response to the user request, making a Hypertext Transfer Protocol (HTTP) request; and

a voice session manager for receiving the HTTP request from the voice server and, in response to the HTTP request, accessing the HTML document, translating the HTML document to a VoiceXML document and sending the VoiceXML document to the voice server, so that the voice server can send the VoiceXML document to the user in an audible form.

2. The system for dynamically translating an HTML document to VoiceXML form according to claim 1, further comprising a document structure analyzer java server page (DSA JSP) for partitioning the HTML document into a plurality of text sections and a plurality of link sections.

3. The system for dynamically translating an HTML document to VoiceXML form according to claim 2, wherein the DSA JSP differentiates between the plurality of text sections and the plurality of link sections by calculating a link density D_l of a section, where the section

may be a link section if the link density D_l is greater than about 0.75, or otherwise the section may be a text section.

4. The system for dynamically translating an HTML document to VoiceXML form according to claim 3, wherein the link density D_l is given by equation $D_l = (H_c - KI_l)/ S_c$, where H_c is a number of non-tag characters in a section that appears inside H_{REF}, a link tag in html, K is a weight value equal to about 5, I_l is a number of links within image maps in the section, and S_c is a total number of non-tag characters in the section.

5. The system for dynamically translating an HTML document to VoiceXML form according to claim 2, further comprising a text summarization java server page (TS JSP) for performing summarization of the plurality of text sections of the HTML document.

6. The system for dynamically translating an HTML document to VoiceXML form according to claim 5, wherein the TS JSP provides text highlights or an abstract that contains important clauses or sentences from the plurality of text sections.

7. The system for dynamically translating an HTML document to VoiceXML form according to claim 2, wherein a plurality of earcons are provided for the user to differentiate between the plurality of text sections and the plurality of link sections.

8. The system for dynamically translating an HTML document to VoiceXML form according to claim 1, further comprising a user profile java server page for interpreting user profile information stored in a database.

9. The system for dynamically translating an HTML document to VoiceXML form according to claim 8, wherein the user profile information includes one or more of authentication information, bookmarks, a list of favorite sites, e-mail account information and user default options.

10. The system for dynamically translating an HTML document to VoiceXML form according to claim 1, wherein the voice session manager calls an HTML parser that parses and corrects the HTML document.

11. A method for dynamically translating an HTML document to VoiceXML form, comprising the steps of:

making an HTTP request in response to a request by a user;

accessing the HTML document in response to the HTTP request;

translating the HTML document to a VoiceXML document; and

sending the VoiceXML document to the user in an audible form.

12. The method for dynamically translating an HTML document to VoiceXML form according to claim 11, further comprising the step of partitioning the HTML document into a plurality of text sections and a plurality of link sections.

13. The method for dynamically translating an HTML document to VoiceXML form according to claim 12, wherein the plurality of text sections and the plurality of link sections are differentiated by calculating the link density D_l of a section, where the section may be a link section if the link density D_l is greater than about 0.75, or otherwise the section may be a text section.

14. The method for dynamically translating an HTML document to VoiceXML form according to claim 13, wherein the link density D_l is given by the equation $D_l = (H_c - KI_l)/ S_c$, where H_c is a number of non-tag characters in a section that appears inside H_{REF}, a link tag in html, K is a weight value equal to about 5, I_l is a number of links within image maps in the section, and S_c is a total number of non-tag characters in the section,

15. The method for dynamically translating an HTML document to VoiceXML form according to claim 12, further comprising the step of performing summarization of the plurality of text sections of the HTML document.

16. The method for dynamically translating an HTML document to VoiceXML form according to claim 12, further comprising the step of providing text highlights or an abstract that contains important clauses or sentences from the plurality of text sections.

17. The method for dynamically translating an HTML document to VoiceXML form according to claim 12, further comprising the step of:

providing a plurality of earcons for the user to differentiate between the plurality of text sections and the plurality of link sections.

18. The method for dynamically translating an HTML document to VoiceXML form according to claim 11, further comprising the steps of:

extracting a segment from the HTML document, the segment including a plurality of tag sequences;

processing the plurality of tag sequences;

finding the largest tag sequence of the plurality of tag sequences, if the plurality of tag sequences are section titles or text tags; and

forming a plurality of segment sections, if the plurality of tag sequences are not section titles or text tags; and collecting the plurality of segment sections.

19. The method for dynamically translating an HTML document to VoiceXML form according to claim 18, further comprising the steps of:

processing the plurality of segment sections;

obtaining an HTML markup of a segment section if the segment section is a text section;

summarizing the HTML markup of the segment section; and

forming an HTML markup object structure from the summarized HTML markup.

20. The method for dynamically translating an HTML document to VoiceXML form according to claim 19, further comprising the steps of:

processing a plurality of tags in the HTML markup object structure;

adding a VoiceXML audio tag from a paragraph or text earcon;

creating java speech markup language (JSML) text for a text-to-speech (TTS) engine;

creating a grammar from embedded tags;

creating a VoiceXML prompt tag if a tag among the plurality of tags is a paragraph tag or a text tag; and

creating a VoiceXML form tag.

21. The method for dynamically translating an HTML document to VoiceXML form according to claim 11, further comprising the step of interpreting user profile information.

22. The method for dynamically translating an HTML document to VoiceXML form according to claim 21, wherein the user profile information includes one or more of authentication information, bookmarks, a list of favorite sites, e-mail account information and user default options.

23. The method for dynamically translating an HTML document to VoiceXML form according to claim 11, further comprising the steps of:

making an HTTP connection and accessing a universal resource allocator (URL);

parsing an HTTP header of the HTML document;

correcting the HTML document if HTML is ill-formed; and

converting the HTML document to object representation.

24. A system for dynamically translating a Hypertext Markup Language (HTML) document to Voice eXtensible Markup Language (VoiceXML) form comprising:

a voice server for receiving a user request and, in response to the user request, making a Hypertext Transfer Protocol (HTTP) request;

a voice session manager for receiving the HTTP request from the voice server and, in response to the HTTP request, accessing the HTML document, translating the HTML document to a VoiceXML document and sending the VoiceXML document to the voice server, so that the voice server can send the VoiceXML document to the user in an audible form;

a document structure analyzer java server page (DSA JSP) for partitioning the HTML document into plurality of text sections and a plurality of link sections;

a text summarization java server page (TS JSP) for performing summarization of the plurality of text sections of the HTML document; and

a user profile java server page for interpreting user profile information stored in a database, including one or more of authentication information, bookmarks, a list of favorite Web sites, e-mail account information and user default options.

25. The system for dynamically translating an HTML document to VoiceXML form according to claim 24, wherein the DSA JSP differentiates between the plurality of text sections and the plurality of link sections by calculating the link density D_l of a section, where the section

may be a link section if the link density D_l is greater than about 0.75, or otherwise the section may be a text section.

26. The system for dynamically translating an HTML document to VoiceXML form according to claim 25, wherein the link density D_l is given by the equation $D_l = (H_c - KI_l)/ S_c$, where H_c is a number of non-tag characters in a section that appears inside H_{REF}, a link tag in html, K is a weight value equal to about 5, I_l is a number of links within image maps in the section, and S_c is a total number of non-tag characters in the section,

27. The system for dynamically translating an HTML document to VoiceXML form according to claim 24, wherein a plurality of earcons are provided for the user to differentiate between the plurality of text sections and the plurality of link sections.

28. The system for dynamically translating an HTML document to VoiceXML form according to claim 24, wherein the TS JSP provides text highlights or an abstract that contains important clauses or sentences from the plurality of text sections.

29. The system for dynamically translating an HTML document to VoiceXML form according to claim 24, wherein the voice session manager calls an HTML parser that parses and corrects the HTML document.